

NEW SPECIES OF NEOTROPICAL  
LEAFHOPPERS IN THE TRIBE COELIDIINI  
(HOMOPTERA: CICADELLIDAE: COELIDIINAE)  
WITH A REVISED KEY TO SOME SPECIES<sup>1</sup>

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**ABSTRACT:** Five new species in five genera of the tribe Coelidiini are described and illustrated. These include *Dicodia kleini*, *Boliviela sarcula*, *Omanolidia globosa*, *Tinocripus elongatus* and *Evansolidia tumida*. A revised key to species in *Dicodia* is also given.

Since the revision of the tribe Coelidiini (Nielson, 1982e), 27 additional new taxa have been described from the Neotropical region (Nielson, 1983i, 1986d, 1988a). Five new species, one in each of the genera *Dicodia*, *Boliviela*, *Omanolidia*, *Tinocripus* and *Evansolidia*, are described and illustrated in this paper. A revised key to the species in *Dicodia* is also included.

Speciation in this group has not been as extensive as in its sister group, the Teruliini, in the Neotropical region. Reasons for the difference are unknown but it is possible that the phenomena may be related to the origin of the tribes. Members of the Coelidiini occur in the tropical zoogeographical regions whereas the teruliines are restricted to the Neotropical region except for two adventive genera in the Nearctic region and one introduced species in the Ethiopian region. The coelidiines may have originated in the Oriental region, elements of which reached the Neotropical and Ethiopian regions via neocontinental development. Some intrusions into the southern and far eastern Palearctic region have been made by a few species. All of the known genera in these zoogeographical regions are indigenous to their respective regions including *Calodia* which has moved extensively into the Australian region (Austro-Malayan subregion) from the Oriental region (Nielson, 1990b).

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Key to species of *Dicodia*

1. Pygofer with long, prominent caudoventral and caudodorsal processes, caudoventral process sharp apically (Fig. 668, Nielson 1982); aedeagus with a single apical spine. . . . . 2
- Pygofer with short caudodorsal process and long, broad, caudoventral process (Fig. 662, Nielson 1982); aedeagus with 2 apical spines (Fig. 666, Nielson 1982) . . . . . *rhombifer* (Linnavuori)
- 2(1). Pygofer with caudodorsal process exceeding apex of caudoventral process (Fig. 668, Nielson 1982) . . . . . 3
- Pygofer with caudodorsal process even with apex of caudoventral process (Fig. 673, Nielson 1982) . . . . . *variegata* (Germar)
- 3(2). Pygofer with caudoventral process closely appressed to caudodorsal process (Fig. 668, Nielson 1982); aedeagus broad throughout most of its length (Figs. 671 & 672, Nielson 1982) . . . . . *germari* Nielson
- Pygofer with caudoventral process removed from caudodorsal process (Fig. 1); aedeagus narrow throughout most of its length (Figs. 2 & 3) . . . . . *kleini* n. sp.

*Dicodia kleini*, n. sp.

(Figs. 1-5)

**Length.** Male 9.00 mm.

General color deep ochraceous with irregular, dark fuscous transverse band medially and subapically on forewings; head, pronotum and scutellum with dark fuscous markings; veins of forewings marked with short piceous and flavous stripes. Similar to *germari* Nielson in male genital characters but larger in size.

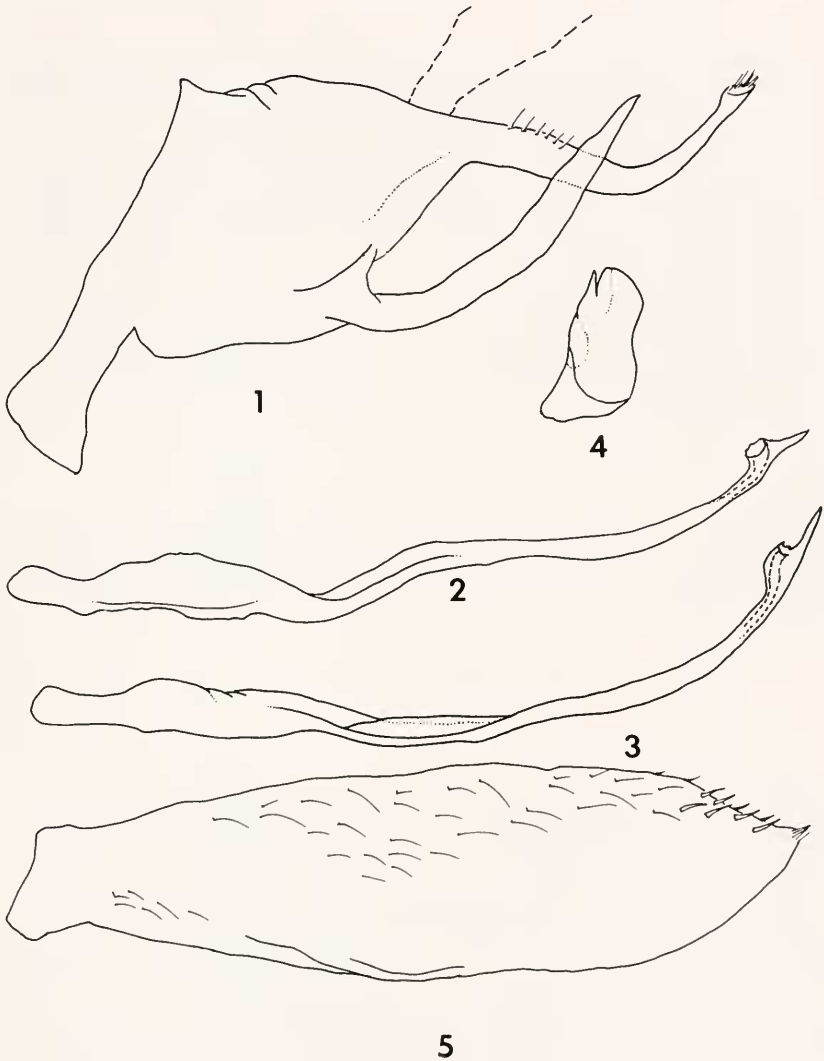
Head in dorsal view moderately large, subconical in outline; crown broad, much wider than eye, produced distally and elevated, slightly carinate laterally; eyes large, elongate ovoid, occupying less than 2/3 of entire dorsal area of head; pronotum very large, much longer than crown; scutellum moderately large, about as long medially as pronotum; forewings and venation typical; clypeus long and very broad; clypellus broad and swollen basally.

**Male.** Pygofer in lateral view with two very long caudal processes, caudodorsal process curved dorsally at middle, caudoventral process curved dorsally from base (Fig. 1); aedeagus long and narrow in dorsal and lateral views with apical spine, shallow longitudinal excavation near middle, gonopore subapical (Figs. 2 & 3); style very short (Fig. 4); plate long and rather broad throughout, abruptly pointed distally (Fig. 5).

**Female.** Unknown.

**Holotype.** (male). BRAZIL: Rondonia, 7 km. E. Costa Marques, 21-31.I.1987, Malaise Trap, T. Klein (CAS). Paratype, 1 male, same data as holotype (author's collection).

**Remarks.** This species is much larger than *germari* (7.20 mm.), has a narrower aedeagus and different configuration in the caudoventral process of the pygofer. I name this species for Terry Klein who has collected a number of new taxa of coelidiine leafhoppers from Brazil, which has measurably added to our knowledge of the biodiversity of the group.



Figs. 1-5. *Dicodia kleini*, n. sp. 1. Male pygofer, lateral view. 2. Aedeagus, ventral view. 3. Aedeagus, lateral view. 4. Right style, dorsal view. 5. Plate, ventral view.

***Boliviela sarcula*, n. sp.**

(Figs. 6-9)

**Length.** Male 8.90 mm.

General color fuscous with broad, piceous transverse bands on forewings; crown, pronotum and scutellum piceous with fuscous markings; veins of forewings with ivory longitudinal spots. Similar to *retrorsa* Nielson in male genital characters.

Head in dorsal view narrower than pronotum, somewhat angular in outline; crown narrow, produced distally, foveate medially, narrower than width of eye; eyes large, semiglobular, occupying more than 2/3 of entire dorsal area of head; pronotum very large, longer than crown, with bullae on surface; scutellum moderately large, little longer medially than pronotum; forewings narrow, venation typical; clypeus long and broad; clypellus with broad, swollen base.

**Male.** Pygofer in lateral view with two, long, narrow caudal processes, caudoventral process longer, extending beyond apex of caudodorsal process (Fig. 6); aedeagus long, shaft tubular, with ventral angulate projection subbasally and long spine subapically in lateral view, gonopore apical; dorsal apodeme bifurcate basally and attached laterally to near base of aedeagus (Figs. 7 & 8); style very long and very narrow in distal 4/5 (Fig. 9).

**Female.** Unknown.

**Holotype** (male). ECUADOR: Napo, Yuca, 50 km. E. Coca, 8.III.1983, L. Huggert, (LU).

**Remarks.** This species keys to couplet 2 in my 1988a paper. It can be distinguished from *retrorsa* by the much longer and narrower caudodorsal pygofer process, by the position of attachment of the dorsal apodeme to the aedeagus and by the much longer and narrower apophysis of the style.

***Omanolidia globosa*, n. sp.**

(Figs. 10-13)

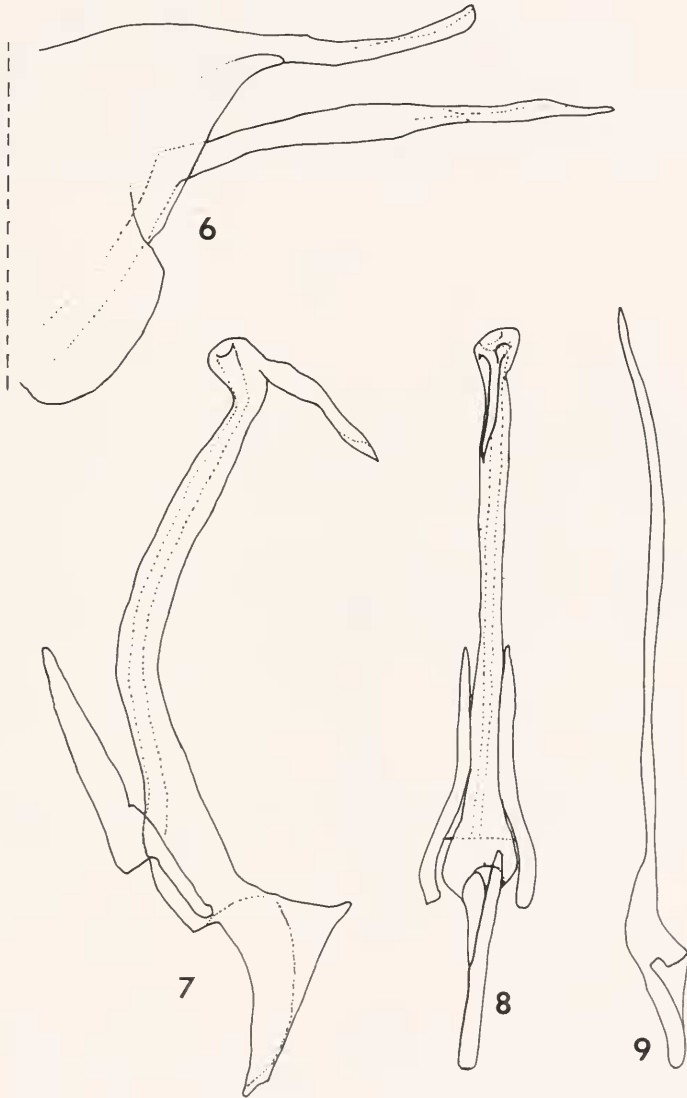
**Length.** Male 7.00-7.30 mm.

General color piceous with two, large, flavous spots each on clavus and middle of costa of forewings; head ochraceous; pronotum and scutellum piceous, tiny flavous specks on forewings; a beautifully marked species. Similar to *keiferi* Nielson in male genital characters.

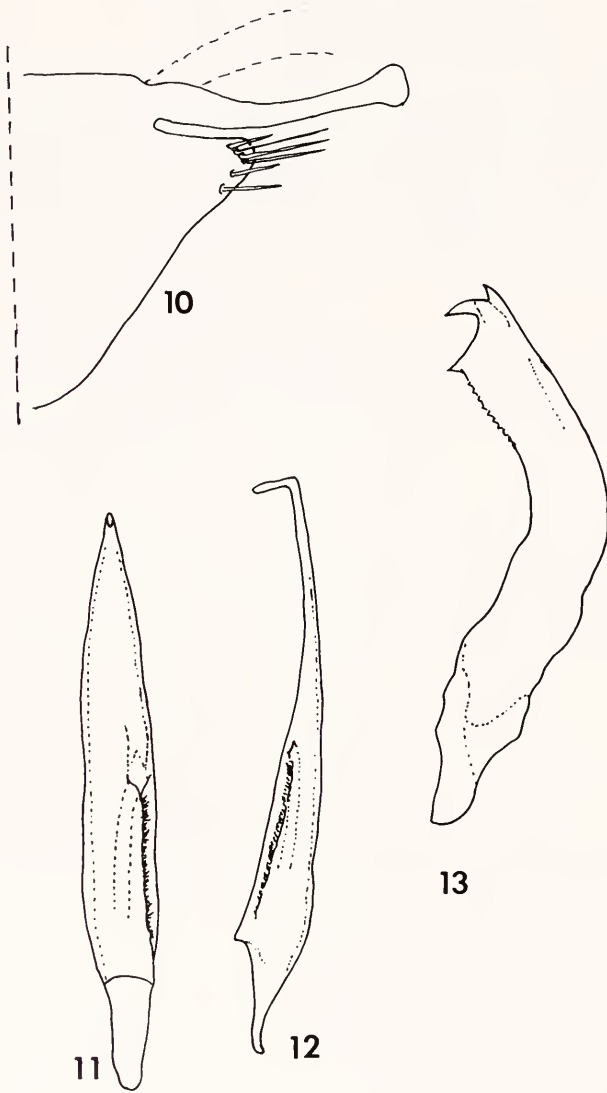
Head in dorsal view narrower than pronotum, subconical in outline; crown narrow, narrower than width of eye at base, lateral margins convergent basally; eyes large, semiglobular, occupying about 2/3 of entire dorsal area of head; pronotum short, slightly longer than crown; scutellum moderately large, longer medially than pronotum; forewings and venation typical; clypeus long and broad; clypellus narrow.

**Male.** Pygofer in lateral view with very long caudodorsal process, process nearly globular apically (Fig. 10); aedeagus in dorsal view broad, slightly tapered distally, in lateral view shaft narrowed in distal 1/3, apex abruptly angled dorsally, numerous short spines in row near lateral margin in basal half of shaft, gonopore laterodorsal near middle of shaft (Figs. 11 & 12); style broad, curved, with three short projections apically and row of short teeth on outer lateral margin in apical 1/3 (Fig. 13).

**Female.** Unknown.



Figs. 6-9. *Boliviela sarcula*, n. sp. 6. Male pygofer, lateral view. 7. Aedeagus, lateral view. 8. Aedeagus, dorsal view. 9. Right style, dorsal view.



Figs. 10-13. *Omanolidia globosa*, n. sp. 10. Male pygofer, lateral view. 11. Aedeagus, dorsal view. 12. Aedeagus, lateral view. 13. Right style, dorsal view.

**Holotype** (male). MEXICO: Michoacan, 7 mi. E. Sahuayo, 20. X.1981, M. W. Nielson (author's collection). Paratype, 1 male, Jalisco, El Colli, 3.VIII.1990, G. Moya-R. (CAS).

**Remarks.** This species keys to couplet 4 in my 1982 paper. It can be distinguished from *keiferi* by the nearly globular apex of the caudodorsal process of the pygofer and by the configuration of the apical projections of the style. The marked forewings, which are absent in *keiferi*, will also separate the species.

*Tinocripus elongatus*, n. sp.

(Figs. 14-17)

**Length.** Male 8.00 mm.

General color ochraceous throughout, shiny. Similar to *gladius* Nielson in male genital characters.

Head in dorsal view narrower than pronotum, conical in outline; crown produced distally, narrow, much narrower than width of eye, elevated and slightly carinate laterally; eyes large, elongate ovoid, occupying more than 2/3 of entire dorsal area of head; pronotum large, much longer than crown; scutellum moderate size, slightly longer medially than pronotum; forewings long and narrow, venation typical; clypeus very long and narrow; clypellus narrow.

**Male.** Pygofer in lateral view with two caudal processes, caudodorsal process short, curved, nearly U-shaped in outline, caudoventral process very long, narrow, reaching to apex of caudodorsal process (Fig. 14); aedeagus long, narrow, tube-like, curved in lateral view, apex flared (Fig. 15); style very long and narrow, swollen before apex and sharply pointed apically (Fig. 16); plate long and narrow, triangulate in distal 1/3, with numerous fine setae along outer lateral margin (Fig. 17).

**Female.** Unknown.

**Holotype.** (male). BRAZIL: Nova Teutonia, Santa Catarina, 13.VII.1964, no collector (NCSU).

**Remarks:** This species keys to couplet 2 in my 1988 paper. It can be distinguished from *gladius* by the configuration of the aedeagus and by the very long, narrow style.

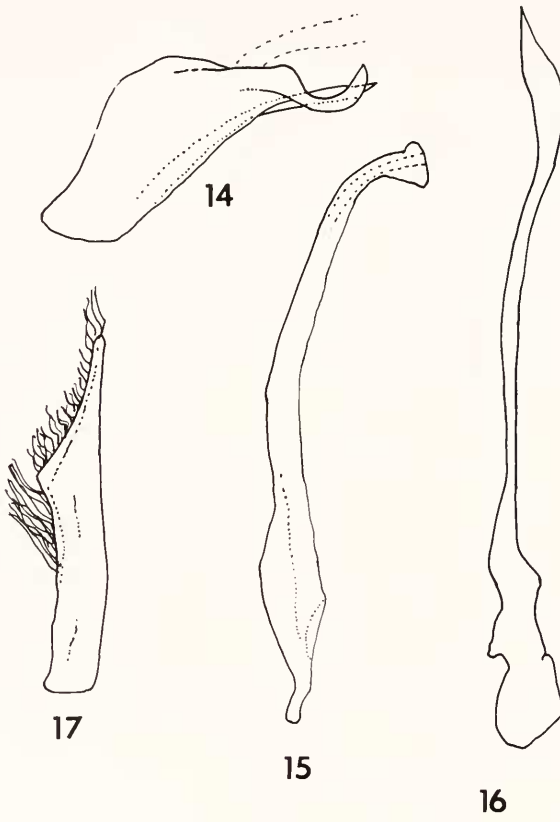
*Evansolidia tumida*, n. sp.

(Figs. 18-21)

**Length.** Male 7.80-8.00 mm.

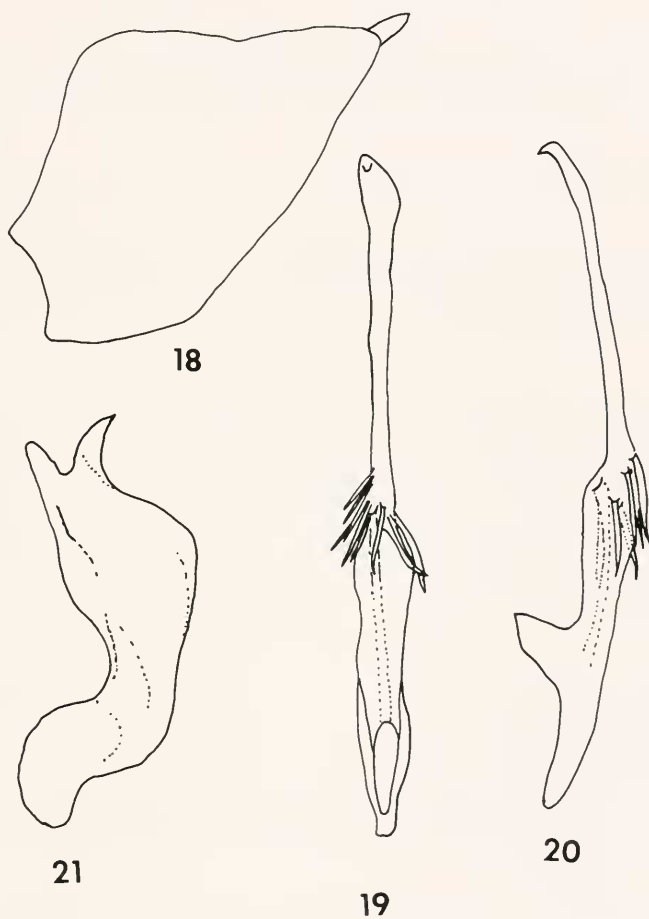
General color dark fuscous with ivory and flavous markings; crown piceous with flavous border and median flavous stripe; pronotum and scutellum piceous with irregular flavous markings; forewings dark fuscous with irregular ivory to flavous transverse band below clavus and narrow disconnected transverse ivory band near middle of clavus, cells basad of anteapical cells with long, narrow, ivory to flavous markings; clypeus flavous with broad fuscous border. Similar to *bispinosa* Nielson in male genital characters.

Head in dorsal view narrower than pronotum, broadly rounded anteriorly; crown narrow, width less than width of eye, lateral margins slightly convergent basally; eyes very



Figs. 14-17. *Tinocripus elongatus*, n. sp. 14. Male pygofer, lateral view. 15. Aedeagus, lateral view. 16. Right style, dorsal view. 17. Plate, ventral view.





Figs. 18-21. *Evansolidia tumida*, n. sp. 18. Male pygofer, lateral view. 19. Aedeagus, dorsal view. 20. Aedeagus, lateral view. 21. Right style, dorsal view.

large, semiglobular, occupying more than 2/3 of entire dorsal area of head; pronotum short, about as long as crown; scutellum large, longer medially than pronotum; forewings and venation typical; clypeus long, narrow; clypellus moderately broad and swollen basally.

**Male.** Pygofer in lateral view with small caudodorsal lobe (Fig. 18); aedeagus long, broad basally and narrow in distal half in dorsal and lateral views, several stout spines near middle of shaft directed basally, gonopore near middle of shaft (Figs. 19 & 20); style very broad in dorsal view, inner lateral margin expanded below middle, apex bifurcate (Fig. 21).

**Female.** Unknown.

**Holotype (Male).** BRAZIL: Rondonia, 7 k. E. Costa Marques, 11-13.IV.1988, Terry Klein (CAS). **Paratype.** 1 male, same data as holotype except 2-3.I.1988, (author's collection).

**Remarks.** This species keys to couplet 3 in my 1988a paper. It can be separated from *bispinosa* by the much broader style and more numerous stout spines on the aedeagus.

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